

Remarks

The Abstract of the Specification is amended herein. Claims 1-20 remain pending in the Application.

Specification

The Abstract of the disclosure is objected because it contains more than 150 words. The Abstract has been amended to contain less than 150 words thereby overcoming the rejection of record.

Oath/Declaration

In the Office Action, the oath or declaration is defective because: It does not include Inventor's signatures. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by: application number and filing date is required. Applicant respectfully submits that the fully executed Oath/ Declaration paperwork was filed in response to the missing parts on 11/01/2001.

Rejection under 103(a)

Claims 1-20

In the Office Action, the Examiner rejected Claims 1-20 under 35 USC 103(a) as being unpatentable over Chi (5784711) and further in view of the background section and Okin (5361337). Applicant has reviewed the cited reference and respectfully submits that the present invention is not rendered obvious in view of Chi and further in view of the background section and Okin for the following rationale.

Applicant respectfully states that Claims 1, 8 and 15 include the feature "identifying critical memory references within the first prefetch region." As the Examiner has stated, Chi does not specifically disclose the critical memory references. However, Applicant disagrees that the background section of Chi does disclose the critical memory references. That is, Applicant understands the background of Chi to teach that cache effectiveness will be increasingly

critical. Applicant does not understand Chi to teach or make obvious the need to identify critical memory references within the first prefetch region.

Applicant further states that Claims 1, 8 and 15 include the feature “the critical memory references within the first prefetch region corresponding to data that may be needed in cache memory if a context switch occurs from a process or thread associated with the second context to a process or thread associated with the first context during program execution by the computer.” As the Examiner has stated, Chi does not specifically disclose the stated feature.

However, Applicant disagrees that the Okin overcomes the shortcomings of Chi. Applicant understands Okin to teach having multiple copies of state elements on the processor and switching from one state to the next when a cache miss occurs. That is, Applicant does not understand Okin to teach or make obvious a prefetch of new data, but instead multiple copies of the same data. Therefore, Applicant understands Okin to teach switching from a first state to a second state that is a copy of the first state, not to teach or make obvious prefetching a process or thread based on the context of the data at the first state.

Therefore, Applicant respectfully submits that neither Chi nor Chi and the background section and Okin make obvious the features of the present claimed invention as recited in Claims 1, 8 and 15, and as such, Claims 1, 8 and 15 are in condition for allowance. Accordingly, Applicant also respectfully submits that Chi in combination with Okin does not render obvious the present claimed invention as recited in Claims 2-7 which are dependent on an allowable Independent Claim 1, Claims 9-14 which are dependent on an allowable Independent Claim 8, and Claims 16-20 which are dependent on an allowable independent Claim 15 and that Claims 2-7, 9-14 and 16-20 recite further features of the present claimed invention. Therefore, Applicant respectfully states that Claims 2-7, 9-14 and 16-20 are allowable as pending from allowable base Claims.

Conclusion

In light of the above amendments and remarks, Applicant respectfully requests allowance of Claims 1-20.

The Examiner is invited to contact Applicants' undersigned representative if the Examiner believes such action would expedite resolution of the present application.

Respectfully submitted,
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